LUKACS, V.F.; GORACZ,Gy.; SIMON, Hedvig

Myocardial changes associated with Icterus gravis of the newborn. II. The effect of steroid treatment. Acta paediat. acad. sci. Hung. 4 no.3:419-424 '63

1. First Department of Paediatrics (director: prof.P.Gegesi Kiss) and Second Institute of Pathology (director: prof. L.Haranghy), University Medical School, Budapest.

LUKACS, V. Ferenc, dr.; GORACZ, Gyula, dr.; SIMON, Hedvig, dr.

Contributions to the study of myocardial changes associated
with icterus gravis neonatorum II. Gyermekgyogyaszat 14 no.12:
364-369 D '63.

1. A Budapesti Orvostudomanyi Egyetem I sz. Gyermekklinikajanak
(Igazgato: Gegesi-Kiss Pal dr. akademikus, egyetemi tanar)
es a II sz. Korbonctani Intezet (Igazgato: Haranghy Laszlo dr.
a MTA lev. tagja, egyetemi tanar) kozlemenye.
         (ERYTHROBLASTOSIS, FETAL)   (MYOCARDIUM)
         (HEMOLYSIS)   (PHENYLHYDRAZINE)
         (HYDROCORTISONE)   (PATHOLOGY)

ZOMBORI, Margit, dr.; GORACZ, Gyula, dr.; PATAKY, Zsigmond, dr.

Contributions to the pathology of breast sarcoma. Magy. sebesz.
16 no.6:385-389 D '63.

1. A Budapesti Orvostudomanyi Egyetem II sz. Korbonctani
Intezetenek (Igazgato: Haranghy Laszlo dr. MTA levelezo tag)
es a Budapesti Orvostudomanyi Egyetem I sz. Sebeszeti Klinikaja
(Igazgato: Hedri Endre [deceased] dr. egyetemi tanar) kozlemenye.
        (BREAST NEOPLASMS)   (SARCOMA)
        (SURGERY, OPERATIVE)   (PATHOLOGY)
        (CYSTOSARCOMA PHYLIOIDES)

HUNGARY

ROSTA, Janos, Dr, GORACZ, Gyula, Dr: Medical University of Budapest, I. Pediatric Clinic, II. Pathological Institute (Budapesti Orvostudomanyi Egyetem, I. Gyermekklinika, II. Korbonctani Intezet).

"The Embryopathy of Mumps."

Abstract: [Authors' Hungarian summary] The authors report a case of embryonic damage, caused by mumps. The mumps, contracted during the sixth week of pregnancy by the mother, was verified by a physician. The infant was born with severe heart defect and died two months later. In addition to the heart defect, dysraphia of the brain was also discovered during autopsy. On histological examination, changes in the pancreas, salivary glands, heart and liver were noted which are thought to be a result of the interuterine infection. Serological tests and embryological data support this assumption. All Western references.

1/1

SZTANKAY, Csaba dr, GORACZ, Gyula, dr.

LUKACS, V.F.; GORACZ, Gy.; SIMON, Hedvig

Myocardial changes associated with icterus gravis of the new-born.Pt.3. Acta paediat. 6 no.2:191-198 '65.

1. First Department of Paediatrics, University Medical School, Budapest, and Heim Pal Children's Hospital, Budapest. Submitted January 11, 1965.

GORACZ, I.

The effect of acute inflammation on the growth of experimental carcinoma in rats and on human breast carcinoma. Orv. Hetil. 93 no. 8:251-252 24 Feb 1952.   (CLML 23:3)

1. Doctor. 2. Roentgen Clinic (Director -- Prof. Dr. Nandor Ratkocxy), Budapest Medical University.

GOBACZ, I.

Experimental contributions on the problem of endogenous carcinogenic substances. Orv. hetil. 94 no.15:415-417 12 Apr 1953. (CLML 24:4)

1. Doctor. 2. Roentgen Clinic (Director -- Prof. Dr. Nandor-Batkocsy), Budapest Medical University.

GORAJ, Leszek

    Electronic apparatus for distant measuring of parameters of deposits
and for the rational exploitation of petroleum boreholes. Wiad naft
6 no.12:282-284 D '60.   (EEAI 10:6)
      (Petroleum)   (Electronic measurements)

TEICHEN, Jacek, mgr inz.; POLACZEK, Czeslaw, inz.; GORAJ, Leszek

Modern measuring technique and automation in mining petroleum
and gas deposits. Nafta 21 no.3:72-74 Mr '65.

1. Petroleum Institute, Krakow.

PADOVTSOVA, G.;   GORAK, B.;   BOR, I.;   BRDLIK, professor, zaveduyushchiy,

Angiocardiography in congenital anomalies of the heart shape. Vop.pediat.
21 no.2:35-47 Mr-Ap '53.   (MLRA 6:6)

1. Vtoraya detskaya klinika Prazhskogo universiteta.
   (Diagnosis, Radioscopic)   (Heart--Diagnosis)   (Heart--Abnormities
                                                    and deformities)

KHASYMSKI, M.; KEL'M, M. [Kelm, M.]; SHIDLOVSKAYA, S. [Szydlowska, S.];
     GORAK, B. [Horak, B.]; RIKHTER, V.

From public reports of the heads of the delegations of socialist
countries. Tekh. est. 2 no.8:7-11 Ag '65.   (MIRA 18:9)

1. Direktor TSentra promyshlennoy estetiki, khudozhestvennogo
proyektirovaniya i konstruirovaniya Narodnoy Respubliki Bolgarii
(for Khasymski). 2. Predsedatel' Soveta po khudozhestvennomu kon-
struirovaniya Germanskoy Demokraticheskoy Respubliki (for Kel'm).
3. General'nyy sekretar' Soveta po tekhnicheskoy estetike pri
Predsedatele Soveta Ministrov Pol'skoy Narodnoy Respubliki (for
Shidlovskaya). 4. Zamestitel' ministra promyshlennosti tovarov
shirokogo potrebleniya, zamestitel' predsedatelya Soveta po
tekhnicheskoy estetike Chekhoslovatskoy Sotsialisticheskoy
Respubliki (for Gorak). 5. Direktor TSentra khudozhestvennogo
konstruirovaniya v Zagrebe Sotsialisticheskoy Federativnoy
Respubliki Yugoslavii (for Rekhter).

GORAK, I.

Manufacture of worsted yarn from polyester fibers and mixtures
of them. Tekst.prom. 20 no.8:66-69 Ag '60.   (MIRA 13:9)

1. Sotrudnik Chekhoslovatskogo Nauchno-issledovatel'skogo
instituts.shersti v g.Brno.
   (Worsted)   (Textile fibers, Synthetic)

MATENA, Sh.,doktor tekhn.nauk prof. (Chekhoslovatskaya Sotsialisticheskaya
Respublika, Praga); GORAK, K.,inzh.

Low-voltage net-type closed networks. Izv.vys.ucheb.zav.;energ.
3 no.10:17-25 O '60.   (MIRA 13:11)

1. Predstavlena kafedroy elektricheskikh sistem Moskovskogo
ordena Lenina energeticheskogo instituta.
        (Electric power distribution)

S/661/61/000/006/061/081
D267/D302

AUTHORS: Gorak, M., Shneider, B. and Bazhant, V.

TITLE: Molecular spectra of methyl phenyl siloxanes

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh
soyedineniy; trudy konferentsii, no. 6: Doklady, diskus-
sii, resheniye. II Vses. konfer. po khimii i prakt. prim.
kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR,
1961, 272-277

TEXT: The investigation was carried out in order to check the oc-
currence of characteristic frequencies corresponding to the methyl
or phenyl groups, and possibly to discover other characteristic
frequencies in the infrared absorption spectra and Raman spectra.
The general methods of preparing the individual methyl phenyl si-
loxanes (and in particular methyl phenyl tetrasiloxanes) are given.
In all, 23 substituted silanes and siloxanes were studied, mainly
in the frequency range 800 - 600 cm^{-1}. Characteristic frequencies

Card 1/2

Molecular spectra of ...

were detected in both spectra for various elementary members. It was found that the descending displacement of the characteristic frequency for the Si-O-Si group can be used as the approximate measure of the number of phenyl groups in the molecule. To obtain the number of methyl groups in siloxanes it is better to use the method of areas of absorption bands near 1250 cm^{-1} than the method based on the calculation of the apparent coefficients of extinction. It is also possible to determine the number of the separate siloxane members by determining the apparent coefficient of extinction for bands near 840 and 750 cm^{-1}. The true number of phenyl groups is more conveniently determined by quantitative analysis based on ultraviolet spectra. The position of the symmetric frequency of the Si-O bond can be used to differentiate between linear and cyclic compounds, and even to determine the size of the cycle. There are 5 tables.

ASSOCIATION: Institut khimii Chekoslovatskoy Akademii nauk, Praga (Institute of Chemistry, Czechoslovak Academy of Sciences, Prague)

Card 2/2

GORAK, Oldzhikh (Praga)

The LAV A-250 racing motorcycle. Za rul. 16 no.11:22 N '58.

(MIRA 12:1)

(Czechoslovakia--Motorcycles)

GORAK, R

SUBJECT: CSR/Mining   127-10-8/24

AUTHORS: Gorak, R., Mrnka, Z. and Prokop, S., Engineers

TITLE: Mining of Iron Ores in Ejpovice (Razrabotka zheleznykh rud v
              Eypovitse)

PERIODICAL: Gornyy Zhurnal, 1957, #10, pp 34-39 (USSR)

ABSTRACT: The Ejpovice iron ore deposit is located between Rokycany and
              Plseu. The deposit is of the sedimentary type and consists of
              2 ore levels. The ore bodies have many shear zones due to
              tectonic phenomena and their dip angle is approximately 15°.

              The ore of the lower level, whose thickness varies from 0 to
              20 m, contains over 30 % of iron. That of the principal upper
              level, whose thickness is from 15 to 25 m, contains 25 to 27 %
              of iron.

              The roof of the principal ore body is represented by sandstone,
              quartsite and micaceous slate which are very crumbling. The
              covering rocks are represented by Tertiary sediments.

Card 1/2   The whole deposit area is divided by a railroad line into 2
              parts: the northern part occupying 0.5 sq km is exploited by

              the strip mining. The southern part, occupying 0.7 sq km, will
              be mined by the underground method. The planned annual out-
              put of the both parts will total 1,100,000 tons of ore.

              The overburden is removed in a 10 m high bench, while ore is
              mined in 5 m high benches due to considerable tectonic dis-
              turbances.

              Percussion drilling of bore holes, 150 to 200 mm in diameter,
              is performed with Soviet "БУ-20-2" drilling machines.

              Rock and ore are loaded with single-bucket excavators of the
              "Mb-2" and "E-25" types into dump trucks "T-111" (8-ton capa-
              city) and "МАЗ-525" (25-ton capacity).

              The article contains 7 photos and 5 tables.
              No references are cited.
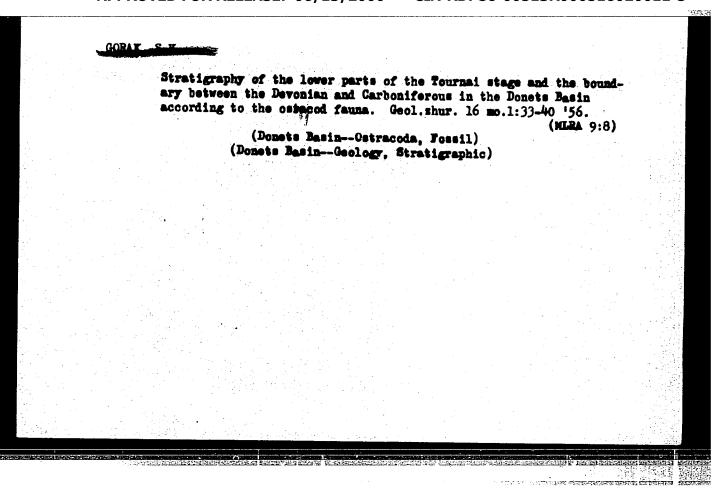ASSOCIATION: Not indicated
PRESENTED BY:
SUBMITTED: No date indicated
AVAILABLE: At the Library of Congress.
Card 2/2

GORAK, S.V.

USSR/Geophysics - Earth's Origin   Nov/Dec 53

"Conference held 27-28 March 1953 in Kiev on Contemporary Theories of the Origin and Development of the Earth," S.V. Gorak and D.Ye. Panchenko (reporters)

Iz Ak Nauk SSSR, Ser Geofiz, No 6, PP 571-573

Conference was organized by the Kiev regional branch of VNITO (All-Union Scientific Society of Engineers and Technicians [mining]) together with the Inst of Geol Sci, Acad Sci USSR, and the geol section of the Kiev House of Scientists. Participating in the conference were scientific workers and institute instructors, astronomers, geologists, geophysicists, geochemists of Moscow, Kiev, and L'vov. Reports were read by B.Yu. Levin, P.Ya. Galushko, Ye.S. Burkser, V.V. Belousov and N.F. Balykhovskiy.

273T88

GOBAK, S. K.

Stratigraphy of the lower parts of the Tournai stage and the bound-
ary between the Devonian and Carboniferous in the Donets Basin
according to the ostracod fauna. Geol.zhur. 16 no.1:33-40 '56.

(MLRA 9:8)

(Donets Basin--Ostracoda, Fossil)
(Donets Basin--Geology, Stratigraphic)

SHUL'GA, P.L.; ISHCHENKO, A.M.; ISHCHENKO, T.A.; GORAK, S.V.

On the Devonian supersaline series in the region of Kalaidintsy
in the Dnieper-Donets Lowland. Dop. AN URSR no.2:165-168 '57.

(MIRA 10:5)

1. Institut geologichnikh nauk AN URSR. Predstaviv akademik
AN URSR V.G. Bondarchuk.
        (Dnieper Lowland--Geology, Stratigraphic)

GORAK, S. V.

SHUL'GA, P.L.; GORAK, S.V.

Some results of the Dnieper-Donets geological expedition of the Academy of Sciences of the U.S.S.R. in the summer of 1956. Visnyk AN URSR 28 no.2:54-56 F '57.   (MIRA 10:4)

(Dnieper Valley--Geological surveys)   (Donets Basin--Geological
                                                       surveys)

(GORAK, S. V.

20-4-42/60

AUTHORS   Shul'ga, P.L., Ishchenko, A.M.,
                 Ishchenko, T.A. and Gorak, S.V.

TITLE   New Data Concerning the Devonian of the Dnepr-Donets
                 Depression.
                 (Novyye dannyye o devone Dneprovsko-Donetskoy vpadiny.)

PERIODICAL   Doklady Akademii nauk SSSR, 1957, Vol. 115, Nr 4,
                 pp. 780-782 (USSR)

ABSTRACT   Devonian deposits in a normal, undisturbed stratification
                 above the salt mass in the above-mentioned depression
                 were hitherto unknown, although they were since 20 years
                 discovered in breccias at several places. This rendered
                 difficult the determination of the character of the
                 upper salt mass as well as of its age. Just as unsolved
                 remained the problem of the salt age, although several
                 researchers stubbornly ascribed to it a Jivet age.
                 Below the Devonian of the Chernigov elevation and the
                 Pripyat' depression no salt was found. The Pripyat'
                 depression is recently considered by some geologists
                 as a structure independent of the Dnepr-Donets depres-
                 sion. This gave rise to the assumption of a different
                 facial stand of the Devonian in these two regions and
CARD 1/3   of a different age of salt in them. It was not before a

20-4-42/60

New Data Concerning the Devonian of the Dnepr-Donets Depression.

deep boring near the village Kalaydintsy (northwest of
Lubny) in the year 1956 that clearness was obtained.
But the Devonian layers were wrongly classified with
the Carboniferous, in spite of the Devonian age of the
spores determined from it. Upper Visé deposits occur
in the Devonian roof. Numerous foraminifera were deter-
mined here which indicate an agreement of the contained
rocks with the lower half of the $C_1^V g$ zone of the Donets

basin. After a thorough description of the individual
layers and the fossils contained in them the authors come
to the following conclusion:
1) Apart from the salt and the lower portion of salt
   the Devonian is in the Dnepr-Donets depression represen-
   ted by a normally deposited thick (about 2000 m) mass
   of Upper Devonian upper salt deposits. They correspond
   to the upper salt mass of the Upper Devonian of the
   Pripyat' deflection.
2) In the late Devonian era the Dnepr-Donets depression
   and the Pripyat' deflection formed a uniform
   geological structure. They possessed a uniform stage
   formation and sedimentation which took place as well

CARD 2/3

New Data Concerning the Devonian of the Dnepr-Donets Depression.

20-4-42/60

under conditions of a continental lagoon as under
conditions of a shallow sea. Temporarily a direct con-
nection with the Western European Devonian sea
existed.
3) The present data indicate that at the late Devonian
   time salt structures occured in the relief of the
   Dnepr-Donets depression which were analogous to that
   of Kalaydintsy. Toward the beginning of sedimentation of
   analogues of the lower parts of the $C_1^V g$ zone of the
   Donets basin they were completely cut off.

There are 10 Slavic references.

ASSOCIATION: Institute for Geological Sciences AN Ukrainian SSR.
                  (Institut geologicheskikh nauk Akademii nauk Ukr.
                  SSR)
PRESENTED: By N.M. Strakhov, Academician, March 11, 1957
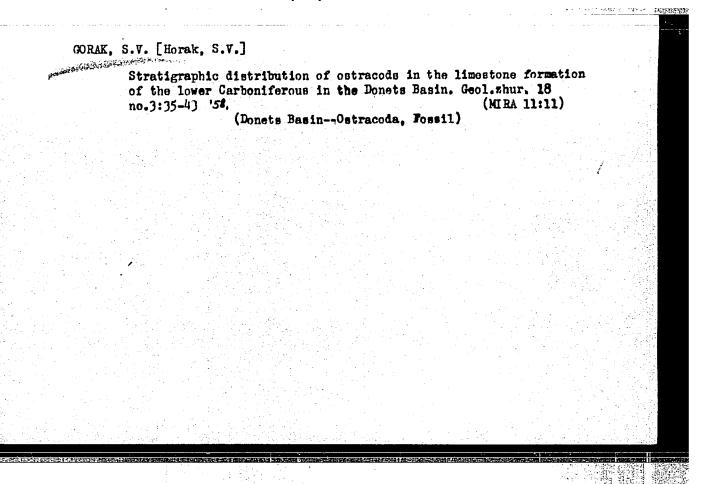SUBMITTED: November 5, 1956
AVAILABLE: Library of Congress.

CARD 3/3

GORAK, Sergey Vladimirovich [Horak, S.V.];BONDARCHUK, V.G. [Bondarchuk,
V.H.], akademik, otv.red.; MEL'NIK, I.F., red.izd-va; MATVIYCHUK,
O.O., tekhn.red.

[Ostracoda in certain middle and upper Carboniferous horizons
of the Donets Basin and factors governing their existence]
Ostrakody deiakykh horyzontiv seredn'oho i verkhn'oho karbonu
Donets'koho baseinu ta umovy ikh isnuvannia. Kyiv, Vyd-vo
Akad.nauk URSR, 1958. 74 p.   (MIRA 12:8)

1. AN USSR (for Bondarchuk).
            (Ostracoda, Fossil)

GORAK, S.V. [Horak, S.V.]

Stratigraphic distribution of ostracods in the limestone formation
of the lower Carboniferous in the Donets Basin. Geol.zhur. 18
no.3:35-43 '58.   (MIRA 11:11)
            (Donets Basin--Ostracoda, Fossil)

GORAK, S.V. [Horak, S.V.]

Anniversary session of the All-Union Paleontological Society.
Geol.zhur. 18 no.3:112-114 ' 58.   (MIRA 11:11)
                    (Paleontological societies)

GORAK, S. V.

Ostracods and stratigraphy of the lower Carboniferous in the
Donets Basin. Trudy VNIGNI no.14:169-176 '59.   (MIRA 12:10)

1.Institut geologicheskikh nauk AN USSR.
            (Donets Basin--Geology, Stratigraphic)

GORAK, S.V. [Horak, S.V.]

Association of facies and ecology of Donets lower Cretaceous
ostracods. Geol. zhur. 19 no.3:3-14 '59.   (MIRA 12:10)
(Donets Basin--Ostracods, Fossil)

AYZENVERG, D.Ye. [Aizenverg, D.IE.]; BARANOVA, N.M.; VEKLICH, M.F.;
    GOLYAK, L.M. [Holiak, L.M.]; GORAK, S.V. [Horak, S.V.];
    DIDKOVSKIY, V.Ya. [Didkovs'kyi, V.IA.]; ZELINSKAYA, V.O.
    [Zelins'ka, V.O.]; ZERNETSKIY, B.F. [Zernets'kyi, B.F.];
    KAPTARENKO-CHERNOUSOVA, O.K.; KRAYEVA, Ye.Ya. [Kraieva, IE.IA.];
    KRASHENINNIKOVA, O.V.; KUTSIBA, A.M.; LAPCHIK, T.Yu.; MAKARENKO,
    D.Ye.; MOLYAVKO, G.I. [Moliavko, H.I.]; MULIKA, A.M.; PASTERNAK,
    S.I.; PERMYAKOV, V.V.; ROMODANOVA, A.P.; ROTMAN, R.N.; SLAVIN, V.I.;
    SOKOLOVSKIY, I.L.; SOROCHAN, O.A.; SYABRYAY, V.T.; TKACHENKO, T.O.;
    SHUL'GA, P.L. [Shul'ha, P.L.], doktor geol.-mineral.nauk; YAMNICHENKO,
    I.M. [IAmnychenko, I.M.]; BONDARCHUK, V.G. [Bondarchuk, V.H.], akade-
    mik, otv.red.

[Atlas of paleogeographical maps of the Ukrainian and Moldavian
S.S.R. with lithofacies elements. Scale 1:2,500,000] Atlas paleo-
geografichnykh kart Ukrains'koi i Moldavs'koi RSR z elementamy
litofatsii. Masshtab 1:2,500,000. Sklaly D.IE. Aizenverg i dr.
Za zahal'nym kerivnytstvom V.H.Bondarchuka. Kyiv, 1960. xvi p.,
78 col.maps.   (MIRA 13:12)

1. Akademiya nauk USSR, Kiyev. Institut geologicheskikh nauk.
2. Institut geologicheskikh nauk AN USSR (for all, except Bondarchuk,
Pasternak, Slavin). 3. Instytut geologii koryanykh kopalyn AN URSR
(for Pasternak). 4. Moskovskiy gosudarstvennyy universitet im.
Lomonosova (for Slavin).
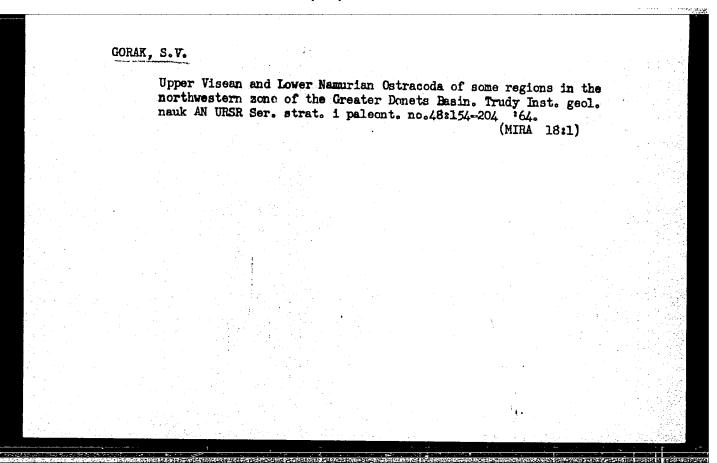 (Ukraine--Paleogeography--Maps) (Moldavia--Paleogeography--Maps)

KRANDIYEVSKIY, Vadim Semenovich[Krandiievs'kyi, V.S.]; GORAK, S.V.
    [Horak, S.V.], kand. geol.-miner. nauk, otv. red.;
    SERDYUK, O.P., red.; TURBANOVA, N.A., tekhn. red.

    [Ostracoda in the Silurian sediments of Podolia] Fauna
    ostrakod siluriiskikh vidkladiv Podillia. Kyiv, Vyd-vo
    AN URSR, 1963. 147 p.   (MIRA 16:11)
            (Podolia--Ostracoda, Fossil)

GORAK, S.V.

Upper Visean and Lower Namurian Ostracoda of some regions in the
northwestern zone of the Greater Donets Basin. Trudy Inst. geol.
nauk AN URSR Ser. strat. i paleont. no.48:154-204 '64.

(MIRA 18:1)

BERENSHTEYN, Leonid Yefimovich; GORAK, Vladimir Vladimirovich
    (Horak, V.V.]; GODLEVSKAYA, V.O.[Hodlevs'ka, V.O.], red.;
    MEYEROVICH, S.L., tekhn. red.

[The Ukraine works for virign lands] Ukraina - tsilynnym
zemliam. Kyiv, Derzhpolitvydav URSR, 1962. 81 p.
                                          (MIRA 15:7)
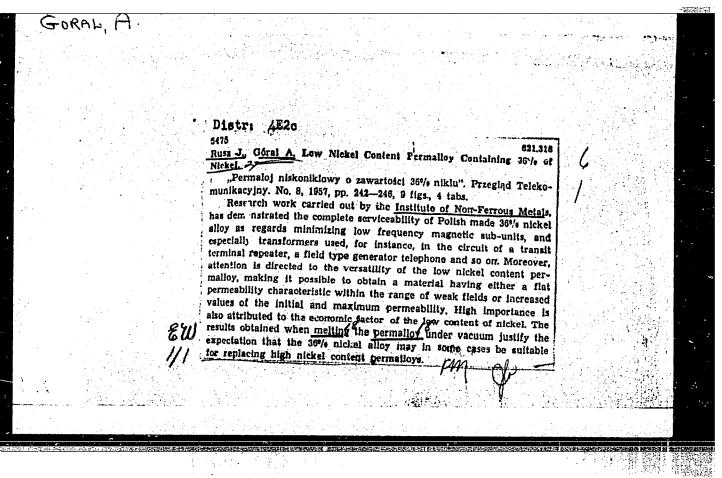   (Ukraine—Agriculture)

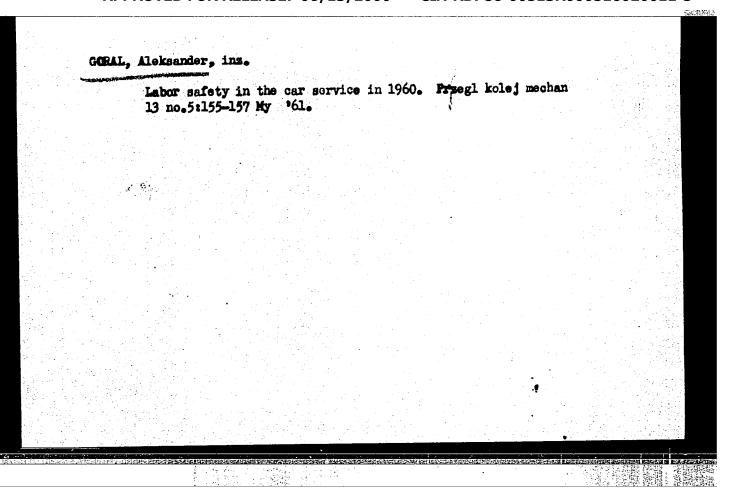GORAKOVA, Korneliya [Horakova, Kornelia]; SHVARTS, Shtefan [Schwarz, Stefan]

Cyclic matrices and algebraic equations over a finite field. .
Mat fyz cas SAV 12 no.1:36-46 '62.

1. Katedra matematiky Slovenskej vysokej skoly technickej, Bratislava.
Authors' address: Gottwaldovo namesti 2, Bratislava.

GORAL, A.

Distr: 4E2o

5475

631.318

Rusz J., Góral A. Low Nickel Content Permalloy Containing 36% of Nickel.

"Permaloj niskoniklowy o zawartości 36% niklu". Przegląd Telekomunikacyjny. No. 8, 1957, pp. 242—246, 9 figs., 4 tabs.

Research work carried out by the Institute of Non-Ferrous Metals, has demonstrated the complete serviceability of Polish made 36% nickel alloy as regards minimizing low frequency magnetic sub-units, and especially transformers used, for instance, in the circuit of a transit terminal repeater, a field type generator telephone and so on. Moreover, attention is directed to the versatility of the low nickel content permalloy, making it possible to obtain a material having either a flat permeability characteristic within the range of weak fields or increased values of the initial and maximum permeability. High importance is also attributed to the economic factor of the low content of nickel. The results obtained when melting the permalloy under vacuum justify the expectation that the 36% nickel alloy may in some cases be suitable for replacing high nickel content permalloys.

GORAL, Aleksander, inz.

Labor safety in the car service in 1960. Przegl kolej mechan
13 no.5:155-157 My '61.

GORAL, Arkadiuss; MAJKA, Jan

Certain problems of the theory and design of symmetric transformer-coupled transistor converters. Prace Inst teletechn 3 no.2:131-149 '59;

P/022/60/000/008/002/004
A222/A026

AUTHOR: Goral, Arkadiusz, Master of Engineering

TITLE: Magnetic Polarization Elements. Magnetic Polarization Reactor
               Elements; Ferroresonant Elements

PERIODICAL: Przeglad Telekomunikacyjny, 1960, No. 8, pp. 238 - 245

TEXT: The paper is a continuation of the article "Elementy o prostokatnej
petli histerezy - transformatory nsycane" (Elements with a rectangular hysteresis
loop - saturation transformers) printed in the 10-11, 1959 issue of the periodical.
The author presents a basic description of physical and technological properties
of magnetic materials used in the construction of magnetic polarization elements;
he further describes memory storage properties of ferromagnetic cores with a re-
ctangular magnetization loop and the principles of saturation transformers in
dynamic circuits. Frequent use is made of references; no investigation or conclu-
sions are involved. There are 18 figures and 12 references: 2 Polish, 1 Soviet
and 9 English.

ASSOCIATION: Osrodek Badawczy Sprzetu Lacznosci (Research Center of Communications
Card 1/1 ___ Equipment).

P/022/60/000/010/001/012
A222/A126

AUTHOR: Góral, A.

TITLE: Scientific session of the Polish Academy of Sciences on the
             subject: "Reliability, stability and life of radioelectronic
             equipment components"

PERIODICAL: Przegląd telekomunikacyjny, no. 10, 1960, 294

TEXT: The session of the Polish Academy of Sciences with about 150
participants was convened on June 3, 1960, at the Palace of Culture and
Science in Warszawa by a preparatory committee headed by Professor A.Kiliń-
ski. The committee consisted of Director, Master of Engineering J. Auer-
bach; Colonel, Master of Engineering J. Biernacki; Director, Master of
Engineering A. Czechowski; Docent S. Darecki; Master of Engineering A.Góral
(director of the session); Master of Engineering Z. Kaczkowski (Scientific
Secretary); Director, Docent S. Kielan; Director, Doctor of Engineering
A. Wojnar. Four reports and seven papers have been read at the session.
The reports were: On the reliability of electronic equipment (A. Kiliński);
Preliminary working program on the reliability of electronic equipment

Card 1/3

Scientific session of the Polish Academy...   P/022/60/000/010/001/012
A222/A126

(A. Czechowski); Characteristics of reliability tests performed by the OBSL (Communications Equipment Testing Center) (A. Goral); Basic problems of the reliability theory of electronic equipment. Principles of evaluation and methods of analysis of component and organism reliability (K. Grzesiak). The papers were: Excerpts from a paper on performance reliability of commercial radio receivers (S. Osadnik); Work organization in the evaluation of reliability tests (E. Nowakowski); Results of some research on the parameter stability and life of Polish-made electron tubes and point-contact germanium diodes (E. Nowakowski); Results of some research on the reliability, life and stability of OWS-II and OBW resistors (E. Paczkowski); Conclusions from some research on the stability and life of KSF and KRC-type capacitors (E. Paczkowski); Results of research on temperature-induced reversible and irreversible modifications in ferrites (L. Olech and Z. Jaranowski); Research on the applicability of characteristic functions of irreversible processes in the determination of filter stability (H. Dutkowski). The session appointed a commission which consisted of Lieutenant Colonel, Doctor of Engineering T. Niewiadomski (Chief); Doctor of Engineering A. Wojnar; Master of Engineering S. Firkowicz; Lieutenant, Master of Engineering R. Kulesza; Master of

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Scientific session of the Polish Academy...   P/022/60/000/010/001/012
A222/A126

Engineering S. Nowak; Master of Engineering K. Rudzka. The commission
prepared a resolution which is printed in the same issue of the periodical.

Card 3/3

GORAL, A.

Partial switching of rectangular hysteresis-loop ferrites. Bul Ac
Pol tech 9 no.2:95-99 '61

1. Presented by J. Groszkowski.

　　　　(Ferrites)　(Elasticity)

24944

9. 7/40

24.2200

P/019/61/010/002/003/009
D253/D303

AUTHOR: Góral, A.

TITLE: Dynamic characteristics of ferrites with a rectan-
            gular hysteresis loop

PERIODICAL: Archiwum elektrotechniki, v. 10, no. 2, 1961,
            407-438

TEXT: The author deals with the problem of interpreting dynamic
characteristics of ferrites with respect to pulse operation and
magnetic amplifiers. The magnetizing characteristics of ferrites
are marked by the non-linear relationship between flux density and
magnetizing force. The magnetizing force can be expressed as:

$$H = \frac{0.4\pi Iw}{l} , \qquad (1)$$

where H = magnetizing force (Oe), I = magnetizing current A, w =
number of turns, l = mean length of magnetic path in a closed core
or "in a core of infinite length" (cm). The flux density is

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Dynamic characteristics...

expressed as:
$$B = \frac{\Phi}{q} = B_0 + \frac{10^8}{wq} \int_0^\tau u\,dt \qquad (2)$$

where B = mean value of flux density (G_8), B_0 = initial flux density, τ = magnetizing time (sec), q = cross section (cm^2), u = voltage across a choke at a given instant, w = number of turns, Φ = magnetic flux. The complex μ is expressed as:

$$\mu = \frac{\hat{B}}{\hat{H}} = \mu_1 - j\mu_2, \qquad (3)$$

where $\hat{B}$, $\hat{H}$ - first harmonic quantities of flux density and magnetizing force, μ_1 - real part of complex permeability, known as proportionality factor in an expression for inductance, μ_2 - imaginary part of the complex permeability, called the loss factor. The concept of complex permeability is particularly advantageous when considering very weak fields; the analysis of dynamic characteristics of ferrites requires a different approach, the complex permeability is still applicable but with restrictions, eddy current effects must be considered and the process of magnetizing at higher frequencies

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Dynamic characteristics...

generally. In magnetic materials with rectangular hysteresis loop, the residual flux density Br approaches the saturation flux density Bs. The rectangularity factor is

$$p = \frac{Br}{B_s} \qquad (4)$$

and under static conditions the permeability

$$\mu d = \frac{dB}{dH} \qquad (5)$$

when $H = H_c$ the permeability is large. H - magnetizing force, H_c - coercive force. Practical results, using ferrites with rectangular loop helped to establish the following relation

$$\Upsilon M = \frac{S}{H_M - H_0} \qquad (6)$$

where ΥM - magnetizing time from peak to peak of flux density, (switching time), measured on a scope between two points on the induced voltage curve; H_M - magnetizing force, H_0 - critical magnetic force above which permanent changes are introduced to the magnetic material, S - factor of proportionality, called switching

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Dynamic characteristics...

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factor. Particular attention is drawn to the fact that the critical magnetizing force H_0 in this work will not be precisely equivalent to H_0 in expression (6), but H_0 will be the magnetizing force equivalent to H_c in a static hysteresis loop. The following types of core were tested: 1) Ring cores made of tapes of alloys containing 50% Ni and having rectangular hysteresis loop. Tapes of different thickness were used; 2) Ferrite cores. a) Cores employing tapes of 0.06 mm and 0.1 mm thickness produced by the Institute of Non-Ferrous Metals in Gliwice; b) Cores employing 0.05 mm thick tape of HCR alloy of British manufacture; c) Cores of 0.065 mm thickness of permenorm 5000Z produced by Vacuumschmelze GDR; d) Toroidal cores of ferrites Mn-Mg-Zn of nominal composition $35Fe_2O_3$, $31MnO$, $22.5MgO$, $11.5ZnO$ baked at normal air atmosphere at a pressure of 1.5 mm Hg. Inside diameter of core - 3 mm, outside diameter - 4 mm. The graphs in Figs. 16 and 17 represent the relationship $\log S = f (\log \frac{1}{M})$; the interesting point to notice is the change into non-linear part. Oscilloscope tracings of induced voltages into the core during the magnetizing process are shown photographically. The

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Dynamic characteristics...

tracings shown are for different materials and for a different value of the magnetizing charge: $s = S$, $s = \frac{3}{4}S$, $s = \frac{1}{2}S$, $s = \frac{1}{4}S$, $s = \frac{1}{6}S$. Fig. 20 shows the reversible magnetizing process. The results of the experiments indicate that the curves $\Delta\beta = \phi(S)$ can be subject to good approximation by the following function:

$$\Delta B = C_1 + C_2 \text{ th } (\alpha s - \beta). \tag{14}$$

The constants C_1, C_2 and β can be determined from the starting conditions, knowing that at $s = 0$, $\Delta B = Br - B_0$ (see Fig. 20). It should be noted that the main feature of $\Delta B = \phi(s)$ curves is their independence of the series resistance of the magnetizing circuit. The interpretation of the experimental results suggests that within the range of a small magnetizing force (near H_c) non-uniformity of inter-domain boundary motions is predominant. This behavior at low magnetizing force is of importance in magnetic amplifier circuits. There are 29 figures and 28 references: 8 Soviet-bloc and 20 non-Soviet-bloc. The 4 most recent references to English-language publications read as follows: E.M. Gyorgy, "Rotation-

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Dynamic characteristics...

P/019/61/010/002/003/009
D253/D303

al model of flux reversal in square-loop ferrites", J. Appl. Phys.,
v. 28, no. 9, 1957, pp 1011-1015; F.B. Humphrey, E.M. Gyorgy,
"Flux reversal in soft ferro-magnetics." J. Appl. Phys., v. 30,
no. 6, 1959, pp 935-939; W. Lee Shevel, Jr., "Millimicrosecond
switching properties of ferrite computer elements." J. Appl. Phys.,
suppl. v. 30, no. 2, 1959, pp 47-48; A. Papoulis, T.C. Chen,
"Domain theory in core switching" Proceedings of the symposium on
the role of solid state phenomena in electric circuits. Intersci-
ence publishers, 1957, pp 197-232.
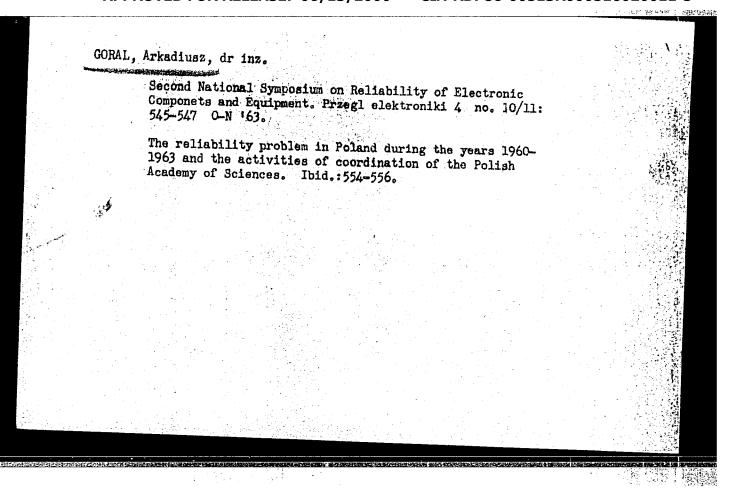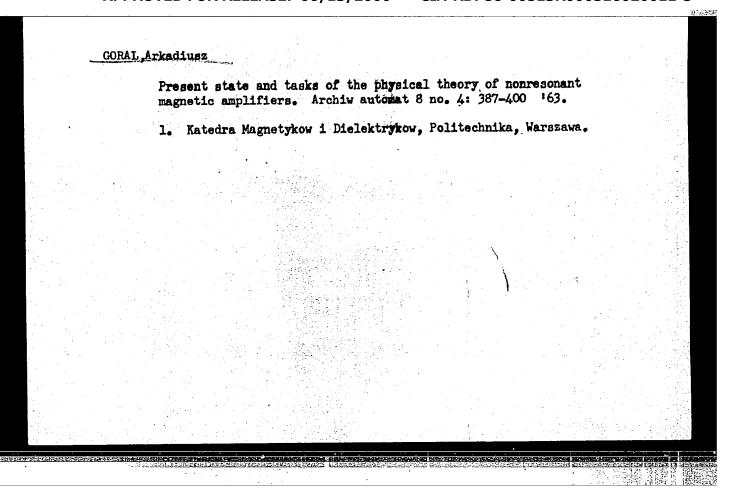
SUBMITTED: May 21, 1960

Card 6/8

GORAL, Arkadiusz, mgr inż.

Certain relations for the circuits of asymmetric transistor
converters with magnetic energy accumulation in the core.
Prace Inst teletechn 4 no.2:3-10 '60.

1. Osrodek Badawczy Sprzetu Lacznosci, Zegrze k.Warszawy.

GORAL, Arkadiusz, dr inz.

Second National Symposium on Reliability of Electronic Componets and Equipment. Przegl elektroniki 4 no. 10/11: 545-547 O-N '63.

The reliability problem in Poland during the years 1960-1963 and the activities of coordination of the Polish Academy of Sciences. Ibid.:554-556.

GORAL,Arkadiusz

Present state and tasks of the physical theory of nonresonant
magnetic amplifiers. Archiw automat 8 no. 4: 387-400 '63.

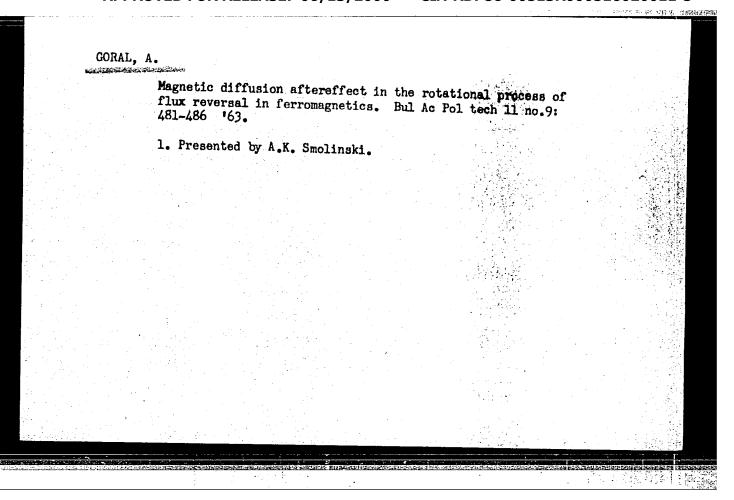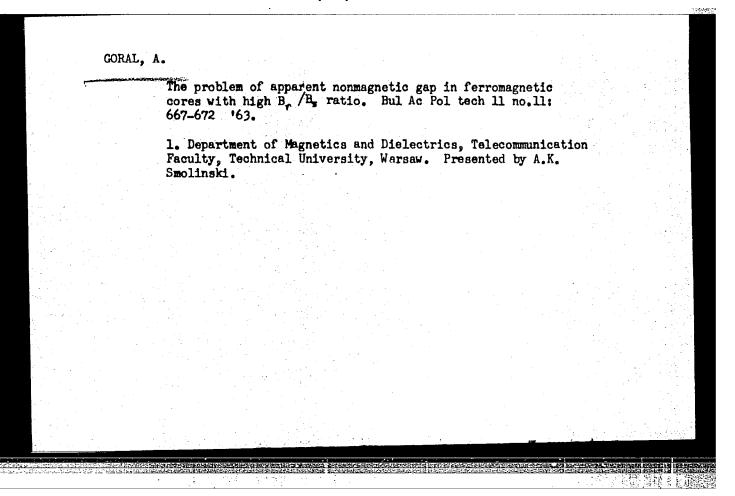1. Katedra Magnetykow i Dielektrykow, Politechnika, Warszawa.

GORAL, Arkadiusz

Analysis of the minor magnetization loop of ferromagnetics
with large Br/Bs. Archiw automat 8 no. 4: 401-409 '63.

1. Katedra Magnetykow i Dielektrykow, Politechnika, Warszawa.

GORAL, A.

On the structural current d nsity method in analysis of the
magnetization process. Bul Ac Pol tech 11 no.8:435-441 '63.

1. Presented by A.K. Smolinski.

GORAL, A.

Magnetic diffusion aftereffect in the rotational process of
flux reversal in ferromagnetics. Bul Ac Pol tech 11 no.9:
481-486 '63.

1. Presented by A.K. Smolinski.

GORAL, A.

The problem of apparent nonmagnetic gap in ferromagnetic
cores with high B_r /B_s ratio. Bul Ac Pol tech 11 no.11:
667-672 '63.

1. Department of Magnetics and Dielectrics, Telecommunication
Faculty, Technical University, Warsaw. Presented by A.K.
Smolinski.

GORAL, A.

Charge control approach to bistate and bistable operation of the magnetic amplifier. Bul Ac Pol tech 11 no. 12:769-775 '63.

1. Department of Magnetics and Dielectrics, Telecommunication Faculty, Technical University, Warsaw. Presented by A.K. Smolinski.

GORAL, Arkadiusz; PAWELEC, Jozef

    Certain criterion of stable operation of digital magnetic
    circuits. Przegl elektroniki 5 no. 5:227 My '64.

P/0031/64/009/001/0061/0069

ACCESSION NR: AP4039541

AUTHOR: Goral, Arkadiusz (Gural', A.); Pawelec, Jozef (Pavelets, Yu.)

TITLE: One condition for the stable operation of parallel digital magnetic ampli-fier systems

SOURCE: Archiwum automatyki i telemechaniki, v. 9, no. 1, 1964, 61-69

TOPIC TAGS: magnetic storage line, magnetic delay line, digital amplifier, magne-tic amplifier, magnetic amplifier system, magnetic device, square hysteresis-loop ferromagnetic, ferromagnetic

ABSTRACT: The condition for the stable operation of the examined system is that k_z 1, where k_z is the disturbance factor, defined as the ratio of the peak value of the magnetic field intensity of the disturbing flux to some threshold value H_0 which is determined from the magnetizing "charge" fluxes according to the equation $\Delta B = \varphi \left[\int_0^\tau H_M dt \right],$, where B is the irreversible change in induction, and H_M is the magnetizing field. The relations defining the transients k_z as a function of the system's parameters, based on the approximation of the diode characteristics and magnetizing pulses, are derived. The magnetic characteristics

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ACCESSION NR: AP4039541

of the core are linearized according to the magnetizing "charge" curves. The appli-
cability of germanium and silicon diodes for use in this system was examined.
According to the derived equations for k_z, a stable operation is relatively easy to
attain if diodes with a clearly-expressed nonlinearity and cores with a high value
for the ratio $H_0\tau_\rho/S$ (τ_ρ is the switching time and S is the switching coefficient)
are used. In the case of $k_z = 1$, no disturbances were observed in the operation of
the system with a change in the peak values of the pulses within the limits -50 to
100%. Experimental results show a very good conformity between calculated and
measured characteristics. Further tests on a two-phase register showed that the
instrument can also operate stably with $k_z > 1$, but with a greatly reduced reliability.
The shape of the core's output voltage pulse and period of its complete magnetic
reversal also have an effect on the stability of operation. Original article has
4 figures and 14 equations.

ASSOCIATION: none

SUBMITTED: 11Sep63   /   DATE ACQ: 18Jun64   ENCL: 00

SUB CODE: DP, EC   NO REF SOV: 000   OTHER: 004

Card   2/2

L 6684-55   EWT(1)/EWA(h)   AFWD(p)/ASD(a)-5/ESD(c)/ESD(dp)/RAEM(t)/RAEM(a)

ACCESSION NR: AP4046461   P/0051/64/009/002/0199/0212   48
                                                                          47

AUTHOR: Goral, Arkadiusz (Gural', A.)

TITLE: Relay and digital systems of nonresonant magnetic amplifiers nonlinear
operation

SOURCE: Archiwum automatyki i telemechaniki, v. 9, no. 2, 1964, 199-212

TOPIC TAGS: nonresonant magnetic amplifier, nonlinear signal, feedback, relay
system, digital system, positive feedback

ABSTRACT: The author discusses two aspects of nonlinear operation of nonresonant
magnetic amplifiers in connection with signal-forced and feedback-forced non-
linearities respectively. Signal forced nonlinearity t he usual case of bistate
operation of magnetic amplifiers, typical for the digital circuits. Feedback
forced nonlinearity results in relay operation of magnetic amplifiers. On the
basis of charge control approach the trasients are analyzed in relay-operating
circuits of center-tap amplistats with additional electric as well as magnetic
positive feedback. Simple and general expressions are obtained for switching time

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L 6684-65
ACCESSION NR: AP4046461

without limitations imposed by the theories hitherto developed, regarding the
value of control circuit linear impedance. It is shown that if half-cyclic re-
sponse is required, the relay-operating magnetic amplifier becomes equivalent
to that of digital type. After the expressions were given of boundary signal
of half-cyclic response, the analogy between bistable and bistate kind of opera-
[...] magnetic amplifiers was further extended regarding the maximum ratio of
[...] quantities corresponding to the two states possible. The main results of
[...] work are summarized in the table containing a comparison between the param-
[...] of two types of circuits under consideration. It is concluded that the uni-
[...] theory of relay and digital magnetic circuits is primarily due to generalized
[...] approach to magnetization processes in ferromagnetics.

ASSOCIATION: Katedra Magnetykow i Dielekrykow Politechniki Warszawskie{
[...] of Magnetics and Semiconductors of the Warsaw Polytechnic Institute)

           23Jan64   ENCL: 00   SUB [...]

NO REF SOV: 001   OTHER: 007

Cord 2/2

CORAL, A.

Diode leakage in "slo response" amplistats; parallel-connected saturable reactor. Bul Ac Pol tech 12 no.6:413-417 '64.

Charge control theory of the series-connected saturable reactor. Ibid.:419-423.

1. Department of Magnetics and Dielectrics, Division of Communication, Technical University, Warsaw. Presented by A.K. Smolinski.

L 23928-65
ACCESSION NR: AP4039453   P/0019/64/013/001/0073/0110

AUTHOR: Goral, A.

TITLE: Mechanism of magnetization and circuit properties of magnetic cores

SOURCE: Archiwum elektrotechniki, v. 13, no. 1, 1964, 73-110

TOPIC TAGS: magnetic core, magnetic core magnetization, magnetization reversal,
ferromagnetics, square loop ferrite, solid state physics, solid state circuitry,
domain wall, Bloch wall, ferromagnetic particle, ferrite

ABSTRACT: The magnetization mechanics determines the circuit properties of mag-
netic cores to a significant extent. The macroscopic characteristics of the core
material can be interpreted on the basis of a model of the displacement of Bloch
walls or by the concept of the rotation of dipoles in relation to the examined
field and frequency ranges. The basic formula for the motion of the Bloch
wall was derived by the author in a previous study (A. Goral, "The equivalent
structural 'current' density method in the magnetization process analysis," Bull.
Acad. Polon., Sc. (Sc. Tech.), vol. 11, 1963, and can be written in the following
form, provided that the term for inertia is omitted:

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L 23928-65
ACCESSION NR: AP4039453

$$m_e\, \ddot{x} + \beta \dot{x} + \alpha x = k M_s\, H_{sf} \cdot \qquad (1)$$

where the threshold field $H_0 = \alpha x$ rev.max./$2M_s$ does not include the actual energy
of the Bloch wall. The solution to equation (1) makes it possible to obtain ex-
pressions which link the values of the acting magnetic fields with the values for
the average flux density. The parameter characterizing the material in the case
of a reversible magnetization is the complex penetration factor. The formula de-
termining the frequency characteristic μ is derived for the case of ferrites
$(\beta_w = 0)$. For the characterization of irreversible behavior of ferromagnetics
(when αx in equation 1 becomes a constant), the author introduces the concept of
remagnetization resistivity. The macroscopic parameters obtained directly by
equation (1) can be assumed by the appropriate "uniform wall displacement" mech-
anism. This mechanism is characteristic for reversible as well as for irrever-
sible magnetization processes taking place in the case of sufficiently high values
of the acting magnetic fields. In general, however, the nonuniformity of the
Bloch wall displacement should be assumed as the basic indication of an irrever-
sible magnetization process within a wide range of changes in the magnetizing
field. This nonuniformity has a powerful influence on the numerical values of the
parameters and at the same time is the starting point for a physical interpreta-
tion of the shapes of the hysteresis loops of engineering magnetic materials. The

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ACCESSION NR: AP4039453

basic equation for the rotational motion of a magnetic dipole has the following form

$$\dot{M} = \frac{\gamma}{1+\alpha_0^2}[M \times H] - \frac{\gamma}{M_s}\left(\frac{\alpha_0}{1+\alpha_0^2}+\lambda\right)[M \times (M \times H)]. \qquad (2)$$

In this equation λ is the damping coefficient from the Laudau-Lifshitz equation; α_0 is the coefficient from the effects of a diffusion magnetic lag. It was proven that equation (2), just as the Gilbert equation of motion, is valid for the case of a "brief relaxation period." The analysis carried out in this study confirmed the validity of the previously developed concepts applicable for a unique theory of the self-saturation of magnetic amplifiers. Supplementary arguments for the development of a physical theory of nonlinear magnetic circuits are presented. "The author wishes to thank Prof. Doctor Adam Smolinskiy for hints and discussions during the progress of this work." Orig. art. has: 21 figures and 66 equations.

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L 23928-65
ACCESSION NR: AP4039453

ASSOCIATION: Katedra Magnetykow i Dielektrykow Politechniki Warszawskiej
(Department of Magnetics and Dielectrics, Warsaw Polytecnnic Institute)

SUBMITTED: 30Aug63   ENCL: 00   SUB CODE: EM

NO REF SOV: 000   OTHER: 023

Card 4/4

GORAL, A.

Charge control approach to series-connected saturable reactor
with external magnetic feedback. Bul Ac Pol tech 12 no.7:
547-550 '64.

1. Department of Magnetics and Dielectrics of the Division
of Communication of the Technical University, Warsaw.
Presented by A.K. Smolinski.

GORAL, A.; WIERZBA, H.

Some results of instantaneous reversible permeability investigations
on square-hysteresis loop ferrite cores. Bul Ac Pol Tech 12 no.9:
675-679 '64.

1. Department of Magnetics and Dielectrics of the Warsaw Technical
University, and Department of Wire Communication of the Gdansk
Technical University. Submitted April 17, 1964.

L 22476-66   EWA(h)

ACC NR: AP6009330   SOURCE CODE: PO/0095/65/013/008/0079/0083

AUTHOR: Goral, A.   59
                                                                B

ORG: Department of Magnetics and Dielectrics, Technical University, Warsaw (Katedra Magnetykow i Dielektrykow, Politechnika)

TITLE: Generalized charge-control approach to nonparametric devices

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 13, no. 8, 1965, 79-83

TOPIC TAGS: dielectric amplifier, magnetic amplifier, electrode, electronic/amplifier, transistor

ABSTRACT: Principles are presented for the structure of a generalized theory of nonparametric, nonresonance amplifiers, their basic physical structure, regardless of their function. Such general concepts are introduced as the averaging time, delay time, and availability time. The fundamental term of the theory is the generalized charge control, which is identified with the process of a total mobile charge in electronic (conductive) devices. The generalized charge control in magnetic or dielectric conductive amplifiers is interpreted correspondingly as a maximum gain of the magnetic or electric fluxes during the operating

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ACC NR: AP6009330   0

cycles. The physical aspects of the input circuit of the device are
expressed by the charge-transforming operator (CTO), and the physical
properties of the input-circuit structure of the device itself are
reflected by the charge-transforming parameter (CTP) of the control
electrode. A few examples, used in the proposed theory, are given for
the purpose of describing the properties of some electronic, magnetic,
and dielectric devices, is emphasized that there are no known appli-
cations of CTO and the CTP in ordinary transistors using nonparametric
charge-control devices. Orig. art. has: 2 figures and 4 formulas.
[Based on author's abstract]   [AH]

SUB CODE: 09/   SUBM DATE: none   ORIG REF: 00 /   OTH REF: 00

Card 2/2 BK

L 22857-66

ACC NR: AP6009331   SOURCE CODE: PO/0095/65/013/008/0085/0090

AUTHOR: Goral, A. (Gural', A.)

ORG: Department of Magnetics and Dielectrics, Technical University,
Warsaw (Katedra Magnetykow i Dielektrykow, Politechnika)

TITLE: Charge control analysis of the ferroelectric amplifier

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques,
v. 13, no. 8, 1965, 85-90

TOPIC TAGS: equation theory, transpolarizer, amplifier, ferroelectric
material, charge control

ABSTRACT: Proceeding from the basic physical aspect of the existence
of a clearly defined threshold field of irreversible changes of pola-
rizations in the ferroelectric materials, a charge control method is
given for investigating the properties of ferroelectric amplifiers.
To carry out the charge control analysis, a basic single element
ferroelectric amplifier was used as a model. The results are expressed
in a qualitative form of equation theory, giving the experimental
characteristics of charge control. The experimental data show the agree-
ment with the theoretical predictions and provide a further illustration

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L 22857-66
ACC NR: AP6009331

of the generality of charge control approach to nonparametric devices.
The theory, presented in this article, is the first in literature on
the numerical description of properties of the "transpolarizer" type
ferroelectric amplifiers developed by S. Pul'vari. Orig. art. has:
4 figures and 19 formulas. [Based on author's abstract]   [AM]

SUB CODE: 09/   SUBM DATE: none   ORIG REF: 002/   OTH REF: 003/

Card 2/2

L 39921-66

ACC NR: AP6018133   SOURCE CODE: PO/0095/65/013/009/0129/0134

AUTHOR: Goral, A.—Gural', A.

ORG: Department of Magnetics and Dielectrics, Telecommunication Faculty, Technical University, Warsaw (Katedra Magnetiyko i Dielektrykov, Wydzial Lacznosci, Politechnika)

TITLE: General theory of charge control of injection-type transistors

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 13, no. 9, 1965, 129-134

TOPIC TAGS: control circuit, control theory, charge control theory, transistor, injection type transistor, charge operator, transfer function, TRANSISTORIZED AMPLIFIER

ABSTRACT: A general theory is presented for an injection-type transistor used as an amplifier. This theory is based on the author's previous concept of the general form of an operator transmission circuit. The charge-transforming operator of an input gate as well as the working transfer function of an output-circuit chain, have been found. An expression has been obtained which describes the properties of an amplifier independent of the signal level and the input resistance. This approach had been considered impossible in the past when the theory of charge control of transistors, formulated by J. J. Sparks and R. Beaufoy, concerned itself with current-source control only. The paper was presented by J. Groszkowski, on 21 June 1965. Orig. art. has: 24 formulas and 2 figures. [Based on author's abstract]   [AM]

ACC NR: AP6017911   (A)   SOURCE CODE: PO/0095/65/013/11-/0155/0163

AUTHOR: Goral, A. B.—Gural', A.

ORG: none

TITLE: Transfer function of an output-circuit of an elementary magnetic amplifier

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 13, no. 11-12, 1965, 155-163

TOPIC TAGS: elementary magnetic amplifier, nonparametric amplifier, ferromagnetic core, output circuit, MAGNETIC AMPLIFIER, MAGNETIC CORE, ELECTRONIC CIRCUIT, FERROMAGNETISM

ABSTRACT: In this article, which is a sequel to his previous works, the author analyzes the determination of the input voltage and parameters of the transfer function of an output-circuit for any charge in an elementary single-core magnetic amplifier. It is shown that nonlinearity is a main feature of magnetic amplifier loading if LC elements are involved. The output circuit can be considered linear only in the case of very weak signals. The author considers the nonlinearity of the transfer function more essential than nonlinearity related to the ferromagnetic-core material. The article was presented by A. K. Smolinski on 17 August 1965. Orig. art. has: 4 figures and 35 formulas.   [GC]

SUB CODE: 09/ SUBM DATE: none/ OTH REF: 002/ ORIG REF: 006/

Card 1/1

GORAL, E

POL.

The authors contend that the optimum gas turbine cycle, that is the
most favourable as regards economic considerations and design (dimen-
sions, weight) can only be correctly selected if due consideration is
given to heat exchange phenomena. Pressure losses in gas turbines with
recuperation system are in this respect, and contrary to many expressed
opinions, of paramount importance, particularly since they vary within
wide limits and are closely linked, though not always lucidly, with such
other parameters as have to be closely examined. Adoption of the theory
of similarity between heat exchangers has made it possible to allow,
with relative accuracy, for — in addition to other factors — the influen-
ce of heat exchange on the efficiency of the turbine cycle. Means are
thus provided, by correctly separating those functions which indivi-
dualise the size, first cost and operation expenditure of recuperators, for
closely defining the actual saving attributable to heat recuperation.

This method illustrated on an example of a simple Brayton-Joule effect
cycle, can also be applied in cases of complex turbine cycles which
have intricate flow circulation and for which, by other means, it is
virtually impossible to determine optimum conditions.

GORAL, Edmund, mgr.ins.; GRZEGORZEWSKI, Wojciech, mgr.inz.

The KG 1 turning engine for steam turbines of medium output.
Energetyka przem 10 no.6:225-226 Je .'62.

1. Zaklad Turbin Parowych, Instytut Techniki Cieplnej, Lodz.

GORAL, Edmund, mgr inz.; GRZEGORZEWSKI, Wojciech, mgr inz.

The AG-8 air turbine for model testing of turbine stages.
Inst techn ciepl prace 9 no. 20:1-18 '64.

GORAL, L.

GORAL, Roman

Frontonasal cranial hernia of unusual dimensions, late results of
therapy. Polski przegl.chir. 27 no.1:3-9 Jan 55.

1. Z II Kliniki Chirurgicznej A. M., w Poznaniu Kierownik: prof.
dr R.Drews.
        (FRONTAL SINUS, diseases,
            frontonasal encephalo-meningocele in child, surg.)
        (NASAL CAVITY, diseases,
            frontonasal encephalo-meningocele in child, surg.)
        (BRAIN, diseases,
            encephalo-meningocele of frontal sinus & nasal cavity
            in child, surg.)
        (MENINGES, diseases,
            encephalo-meningocele of frontal sinus & nasal cavity
            in child, surg.)

GORAL, Roman

Congenital anomalous arteriovenous anastomosis of the extremity.
Polski przegl. chir. 28 no.7:595-601 July 56.

1. Z II Kliniki Chirurgicznej A.M. w Poznaniu. Kierownik: prof.
dr. R. Drews, Poznan, ul. Karwowskiego 22 m. 12.
     (ARM, blood supply,
          arteriovenous fistula, congen. (Pol))
     (FISTULA, ARTERIOVENOUS,
          arm, congen. (Pol))

MASTYNSKA, Maria; GORAL, Roman; BOGALA, Jozef

Significance of potassium in pre- and postoperative therapy. Polski
przegl. chir. 28 no.8:853-856 Aug 56.

1. Z II Kliniki Chirurgicznej A.M. Poznan, Kier.: prof. dr.
R. Drews i z Zakladu Chemii Fizjologicznej A.M. Poznan, Kier.:
prof. Z. Stolzmann. Poznan, ul. Hetmanska 13 m. 5.
     (POTASSIUM, therapeutic use,
          in postop. care (Pol))
     (POSTOPERATIVE CARE,
          potassium replenishment (Pol))

GORAL, Roman

Isolated sarcoma in the gastric lymphatic system. Polski przegl. chir. 28 no.12:1227-1235 Dec 56.

1. Z II Kliniki Chirurgicznej A.M. w Poznaniu Kierownik: prof. Dr. R. Drews. Adres autora: Posnan, ul. Przybyszewskiego 49 (II Klin. Chir. A.M.).
       (STOMACH NEOPLASMS
           lymphosarcoma & reticulum cell sarcoma, surg. (Pol))
       (LYMPHOSARCOMA, case reports
           stomach, surg. (Pol))
       (SARCOMA, RETICULUM CELL, case reports
           stomach, surg. (Pol))

GRACZYKOWSKA-KOCZOROWSKA, Alicja; GORAL, Roman; SALWA, Wieslawa

Hormone-producing tumors of the adrenal cortex and their successful surgery. Polski tygod.lek. 15 no.25:959-963 20 Je '60.

1. Z II Kliniki Chorob Wewnetrznych A.M. w Poznaniu; kierownik: prof. dr Jan Roguski, z II Kliniki Chirurgicznej A.M. w Poznaniu; kierownik: prof. dr Roman Drews i z Zakladu Anatomii Patologicznej A.M. w Poznaniu; kierownik: prof. dr Janusz Groniowski
        (ADRENOGENITAL SYNDROME surg)
        (CUSHING SYNDROME compl)
        (ADRENAL CORTEX neopl)

GORAL, Roman

Gastric polypi (the problem of malignant degeneration). Poznan.
tow.przyjaciol nauk, wydz.lek. 21 no.3:1-58 '61.
(STOMACH NEOPLASMS pathol)   (POLYPI pathol)

GORAL, Roman

Studies on the metastatic spreading of gastric tumors to the lymph nodes. Poznan.tow.przyjaciol nauk, wydz.lek. 21 no.3:63-84 '61.
(STOMACH NEOPLASMS compl)   (LYMPH NODES neopl)

GORAL, Roman

Polyps of the stomach. Polski przegl. chir. 33 no.7/9:761-762 '61.

1. Z II Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof. dr
R. Drews.
(STOMACH DISEASES) . (POLYPI)

GORAL, Roman

Malignant tumors of the lymphatic system of the stomach. Polski przegl. chir. 33 no.7/9:784-785 '61.

1. Z II Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof. dr R. Drews.
(STOMACH NEOPLASMS)   (LYMPHATIC SYSTEM neopl)

GORAL, Roman

Neurinoma of the duodenum as a rare cause of gastrointestinal
hemorrhage. Nowotwory 13 no.2:187-190 '63.

1. Z II Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof.
dr med. R. Drews.
        (DUODENAL NEOPLASMS)   (NEURILEMMOMA)
              (HEMORRHAGE, GASTROINTESTINAL)

GORAL, Roman

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stasis. Pol. przegl. chir. 35 no.4:323-329 '63.

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dr R. Drews.
(JAUNDICE, OBSTRUCTIVE)
(BILE DUCTS, INTRAHEPATIC)
(SURGERY, OPERATIVE)

GORAL, Roman

Intrahepatic biliary stasis. Pol. przegl. chir. 35 no.4:
345-351 '63.

1. Z II Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof.
dr R. Drews.
(JAUNDICE, OBSTRUCTIVE)
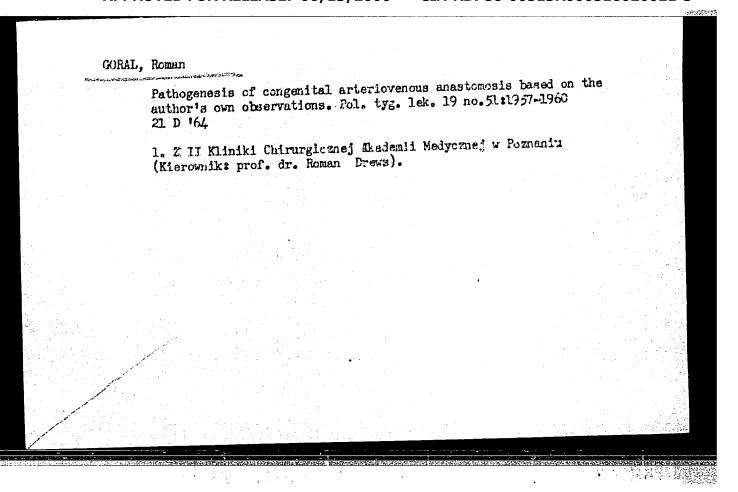(BILE DUCTS, INTRAHEPATIC)
(BILE)

GORAL, Roman; LUBANSKA, Zofia

Review of patients with jaundice caused by extrahepatic
biliary stasis. Pol. przegl. chir. 35 no.7/8:851-853 '63.

1. Z II Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof.
dr R. Drews.
            (JAUNDICE, OBSTRUCTIVE)   (BILE)
                (SURGERY, OPERATIVE)

GORAL, Roman

      Experimental studies on hepatic and renal revascularization.
      Pozn. tow. przyjac. nauk wydz. lek. 28:51-101 '64.

GORAL, Roman

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author's own observations. Pol. tyg. lek. 19 no.51:1957-1960
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(Kierownik: prof. dr. Roman Drews).

GORAL, Roman

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venous anastomoses. Pol. tyg. lek. 19 no.52:1998-2001 28 D'64.

1. Z II Kliniki Chirurgicznej Akademii Medycznej w Poznaniu
(kierownik: prof. dr. Roman Drews).

GORAL, Roman

Apropos of the surgical treatment of jaundice in extrahepatic
bile stasis. Pol. tyg. lek. 19 no.19:715-716 4 My '64.

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(kierownik: prof. dr R. Drews).

GORAL, Roman; KORZENIOWSKI, Andrzej; TUSZYNSKI, Krzysztof

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GORAL, Roman

Accessory vascularization of the liver. Pol. przegl. chir.
37 no.3:206-212 Mr '65.

Attempt at accessory vasculatization of the dog's kidney with
the aid of its stomach. Ibid.:241-247

1. Z II Kliniki Chirurgicznej Akademii Medycznej w Poznaniu
(Kierownik: prof. dr. R. Drews).

GORAL, Stanislaw

Studies on the growth dynamics of the root systems of diploid
and tetraploid forms of Trifolium pratense (L.) and Trifolium
hybridum (L.) Rocz nauk roln rosl 88 no. 3:547-563 '64.

1. Department of Genetics, College of Agriculture, Olsztyn.

BR

P/0007/64/000/037/0011/0011

ACCESSION NR: AP4044534

AUTHOR: Goral, Wladyslaw; Walczewski, Jacek

TITLE: Poland's participation in observation and utilization of artificial satellites

SOURCE: Skrzydlata Polska, no. 37, 1964, 11

TOPIC TAGS: artificial satellite observation, satellite surveillance, satellite data analysis, earth figure, upper atmosphere, international geophysical year, atmospheric density, scientific organization

ABSTRACT: The largest Polish enterprise dealing with artificial sa-
tellites is the Sluzba Obserwacji Sztucznych Satelitow Ziemi (SSZ)
(Artificial Earth Satellite Observation Service) which maintains 10
stations (3 in Warsaw, 2 in Krakow, and one each in Poznan, Gdansk,
Olsztyn, Wroclaw, and Chorzow) connected with astronomical observa-
tories or geodetic centers of universities. The work of the service
is directed and coordinated by Komitet Miedzynarodowej Wspolpracy
Geofizycznej (Committee for International Cooperation on Geophysics).

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ACCESSION NR: AP4044534

of PAN, which also publishes the Biuletyn Polskich Obserwacji Sztucznych Satelitow (Bulletin of Polish Artificial Satellite Observations). The stations are part of the 'Kosmos' network operating out of Moscow, participate in the international 'Interobs' program, and are an integral part of the network observing regularly American and Canadian satellites. At the same time, they work in close cooperation with the state Panstwowy Instytut Hydrologiczno-Meterologiczny (State Institute of Hydrology and Meteorology)(PIHM) and Ministerstwo Lacznosci (Ministry of Communications), utilizing their facilities and equipment. The quality of their observations has won foreign recognition, the Polskie Centrum Obliczeniowe (Polish Computing Center) processes and analyzes data observed in many European stations, and work is now in progress on devising a way to convert sound into visual signals in meterorlogical observations. The author notes the resultant benefits to the Polish economy by way of contribution to eventual improved television reception and improved meterorological forecasts.

ASSOCIATION: None

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ACCESSION NR: AP4044534

SUBMITTED: 00   ENC: 00

SUB CODE: SV, CO   NR REF SOV: 000   OTHER: 000

Card 3/3